

CONTRACT NAS1-00075

The following information has been determined to be exempt from disclosure and has been deleted from the contract:

- Section 18: Key personnel, p. 7;
- Exhibit B – Labor Rate Calculation: Labor rates per hour and indirect handling rates, pp. 18-20;
- Exhibit F – Subcontracting Plan: Key personnel, contractor goals and methodology, and personnel duties to manage the subcontracting effort, pp. 1-7.

The deleted material is exempt from disclosure under 14 C.F.R. 1206.300 (b) (4) which covers trade secrets and commercial or financial information obtained from a person and privileged or confidential. It has been held that commercial or financial matter is “confidential” for purposes of this exemption if its disclosure would be likely to have either of the following effects: (1) impair the Government’s ability to obtain necessary information in the future; or (2) cause substantial harm to the competitive position of the person from whom the information was obtained, National Parks and Conservation v. Morton, 498 F2d 765 (D.C. Cir. 1974).

Regarding the names of key personnel withheld from the contract, disclosure of such information, which was submitted to the Government in confidence, would allow potential competitors to benefit from the company’s efforts to build up a highly successful management team which possesses unique experience and expertise. Such information is not readily available upon request by a third party.

Disclosure of the financial information could cause substantial competitive harm to the contractor by providing its competitors insight into the company’s costing practices and management approaches. Furthermore, disclosure would discourage other companies from participating in future competitive procurements, thereby impairing the Government’s ability to obtain complete and accurate cost data, and in turn, frustrating the mandate to obtain maximum competition in negotiated procurements.

Disclosure of the information in the Subcontracting Plan would discourage future submission of detailed data concerning the company’s implementation of their Subcontracting Plan and impair the Government’s ability to obtain necessary information in the future as well as cause substantial harm to the competitive position of the company.

AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)

RATING

DO-C9

PAGE OF PAGE(S)

See

Attached

2. CONTRACT NO. (Proc. Inst. Ident.) NO.

NAS1-00075

3. EFFECTIVE DATE

6/1/00

4. REQUISITION/PURCHASE REQUEST/PROJECT NO.

RFC.1052

5. ISSUED BY:

CODE

6. ADMINISTERED BY (If other than Item 5)

CODE

National Aeronautics and Space Administration
Langley Research Center
Hampton, VA 23681-2199

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP code)

Computer Sciences Corporation
15245 Shady Grove Road
Rockville, MD 20850

8. DELIVERY

Destination

FOB ORIGIN

OTHER

9. DISCOUNT FOR PROMPT PAYMENT

10. SUBMIT INVOICES (4 copies unless other-wise specified) TO THE ADDRESS SHOWN IN:

ITEM

Block 12

CODE

FACILITY CODE

11. SHIP TO/MARK FOR

CODE

12. PAYMENT WILL BE MADE BY:

CODE

Attn: NAS1-00075, 126/L. M. Harvey
NASA Langley Research Center
Hampton, VA 23681-2199

Financial Management Division, M/S 175
NASA, Langley Research Center
Hampton, VA 23681-2199

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION

10 U.S.C. 2304(c) ()

41 U.S.C. 253(c) ()

14. ACCOUNTING AND APPROPRIATION DATA

PR: RFC.1052 M1791 992 16 04 05 \$854,000 (Complete)

15A. ITEM NO.

15B. SUPPLIES/SERVICES

15C. QTY

15D. UNIT

15E. UNIT PRICE

15F. AMOUNT

1

Computational Analysis and Programming Services (CAPS)

	<u>Est. Cost.</u>	<u>Fee</u>	<u>Total</u>
Base	5,126,315	254,659	5,380,974
First Option	5,434,760	270,006	5,704,766
Second Option	6,256,843	310,812	6,567,655
Third Option	6,425,250	319,168	6,744,418
Fourth Option	6,623,483	329,013	6,952,496
	29,866,651	1,483,658	31,350,309

15G. TOTAL AMOUNT OF CONTRACT \$

16. TABLE OF CONTENTS

(√)	SEC.	DESCRIPTION	PAGE(S)	(√)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
	A	SOLICITATION/CONTRACT FORM			I	CONTRACT CLAUSES	
	B	SUPPLIES OR SERVICES AND PRICES/COSTS		PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS			
	C	DESCRIPTIONS/SPECS./WORK STATEMENTS			J	LIST OF ATTACHMENTS	
	D	PACKAGING AND MARKING		PART IV - REPRESENTATIONS AND INSTRUCTIONS			
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	H	SPECIAL CONTRACT REQUIREMENTS					

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return ___ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents (s) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18. AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number 1-123-RFC.1035 including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER (Type or print)

20A. NAME OF CONTRACTING OFFICER

LISA M. HARVEY

19B. NAME OF CONTRACTOR

19C. DATE SIGNED

20B. UNITED STATES OF AMERICA

20C. DATE SIGNED

BY _____
(Signature of person authorized to sign)

BY *Lisa M Harvey* 5/1/00
(Signature of Contracting Officer)

ORDER FOR SUPPLIES AND SERVICES		IMPORTANT: See Instructions ... GSAR 553.370- 300-1 for distribution.	PAGE 1	OF 31 w/att	PAGES
1. DATE OF ORDER Apr 26 2000	2. ORDER NUMBER T03-00-DS-L001	3. CONTRACT NUMBER GS00T99ALD0203	4. ACT NUMBER NASA Order Number NAS1-00075		

FOR GOVERNMENT USE ONLY	5. ACCOUNTING CLASSIFICATION				6. FINANCE DIVISION		
	FUND See Page	ORG CODE IA	B/A CODE	O/C CODE	AC	SS	VENDOR NUMBER
	FUNC CODE	C/E CODE	PROJ./PROS. NO.	CC-A	MDL	FI	G/L DEBIT
	W/ITEM	CC-B	PRT./CRFT		AI	LC	DISCOUNT

7. TO: CONTRACTOR (Name, address and zip code)
Computer Sciences Corporation
Civil Group
15245 Shady Grove Road
Rockville, MD 20850

CAGE Code: 6A053
DUNS: 612-799-270

8. TYPE OF ORDER REFERENCE YOUR
 A. PURCHASE
 B. DELIVERY

Please furnish the following on the terms specified on both sides of the order and the attached sheets, if any, including delivery as indicated.

This delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above numbered contract.

C. MODIFICATION NO. AUTHORITY FOR ISSUING

9A. EMPLOYER'S IDENTIFICATION NUMBER
95-204-3126

9B. CHECK, IF APPROP. WITHHOLD 20%

Except as provided herein, all terms and conditions of the original order, as heretofore modified, remain unchanged.

10A. CLASSIFICATION
 A. SMALL BUSINESS
 B. OTHER THAN SMALL BUSINESS
 C. SMALL DISADVANTAGED
 D. SMALL WOMEN-OWNED

10B. TYPE OF BUSINESS ORGANIZATION
 A. CORPORATION
 B. PARTNERSHIP
 C. SOLE PROPRIETOR

11. ISSUING OFFICE (Address, zip code and telephone no.)
GSA/FTS/Mid-Atlantic Region
100 Penn Square East, Room 820
Philadelphia, PA 19107
215-656-6308

12. REMITTANCE ADDRESS (MANDATORY)
Computer Sciences Corporation
Civil Group, Civil Division
P.O. Box 8500-S-4610
Philadelphia, PA 19178-4610

13. SHIP TO (Consignee address, zip code and telephone no.)
NASA Langley Research Center
Attn: L.M. Harvey, Mail Stop 126
Contract NAS1-00075
Hampton, VA 23681-2199

14. PLACE OF INSPECTION AND ACCEPTANCE Destination

15. REQUISITION OFFICE (Name, symbol and telephone no.)

16. F.O.B. POINT Destination

17. GOVERNMENT B/L NO.

18. DELIVERY F.O.B. POINT ON OR BEFORE

19. PAYMENT/DISCOUNT TERMS

20. SCHEDULE					
ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QTY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Computational Analysis and Programming Services - Cost	1	lot	\$5,126,315.00	\$5,126,315.00
	Fee	1	ea.	\$254,659.00	\$254,659.00
	1 June 2000 - 31 May 2001				
	Please see Page 1A for further details.				

21. RECEIVING OFFICE (Name, symbol and telephone no.)

TOTAL FROM 300-A(s) ►

22. SHIPPING POINT

23. GROSS SHIP WT.

GRAND TOTAL ► \$5,380,974.00

24. MAIL INVOICE TO: (Include zip code)
General Services Administration (FUND)
NASA Langley Research Center
Attn: Financial Management Div., MS175
Hampton, VA 23681-2199

25A. FOR INQUIRIES REGARDING PAYMENT CONTACT:

25B. TELEPHONE NO. (757)864-2136

26A. NAME OF CONTRACTING/ORDERING OFFICER (Type)
John G. Thomas, Contracting Officer

26B. TELEPHONE NO. (215)656-6324

26C. SIGNATURE *John G. Thomas*

NAS1-00075 (Solicitation No. 1-123-RFC.1035)

Task Order #: T03-00-DS-L001

1A

A1. Award of this task order is made in accordance with the terms and conditions of Contract GS00T99ALD0203, the terms and conditions contained herein, and the contractor's proposal for this order dated March 16, 2000, as amended by their revised proposal dated April 20, 2000.

A2. In accordance with Paragraph 3 of this task order, funding in the amount of \$854,000.00 is available at this time. The applicable funding citation is as follows:

PR RFC 1052: 001 00 9 00 2530 M1791 99216040500 \$854,000.00

A3. In accordance with Paragraphs 2 and 19 of this task order, if all available options are exercised by the Government, the total estimated cost and fee for this task order will be \$31,350,310.

A4. The contractor's wire transfer address for payment purposes can be found on page 16 of the contractor's revised Business Proposal.

A5. Applicable addresses for shipping can be found in Exhibit C herein.

A6. CSC is hereby provided authorization for direct submission of interim vouchers under this task order.

TASK ORDER

1. STATEMENT OF WORK

The Contractor shall perform the effort specified in Exhibit A, Statement of Work (SOW), entitled Computational Analysis and Programming Services (CAPS).

2. ESTIMATED COST AND FIXED FEE (NASA 1852.216-74) (DEC 1991)

The estimated cost for Year 1 of this task order is \$5,126,315 exclusive of the fixed fee of \$254,659. The total estimated cost and fixed fee for Year 1 is \$5,380,974. Please see Paragraph 19 herein for the estimated cost and fixed fee amounts for each of the option periods. The total estimated cost and fixed fee for this task order, inclusive of all available options, is \$31,350,310.

3. CONTRACT FUNDING (NASA 1852.232-81) (JUN 1990)

- (a) For purposes of payment of cost, exclusive of fee, in accordance with the "Limitation of Funds" clause, the total amount allotted by the Government to this task order is \$813,333. This allotment is for the performance of work in accordance with the limitations as set forth in GSA Contract No. GS00T99ALD0203, Task Order No. T03-00-DS-L001, as authorized by the Contracting Officer, and covers the following estimated period of performance: June 1, 2000 through September 1, 2000.
- (b) An additional amount of \$40,667 is obligated under this task order for payment of fee.

4. ADMINISTRATION OF CONTRACT FUNDING

- (a) The Contractor agrees that all future incremental funding shall be accomplished by Administrative Change Modifications issued by NASA Langley Research Center and that the funding procedure shall in no way change the Contractor's notification obligations as set forth in the "Limitation of Funds" clause.
- (b) In addition to the requirements of the "Limitation of Funds" clause, the Contractor shall notify the GSA Contracting Officer and the NASA Contracting Officer in writing if, at any time, the Contractor has reason to believe that the total cost to the Government for the complete performance of this task order will be greater or substantially less than the then total estimated cost of the task order. Such notification shall give a revised estimate of the total cost for the performance of this task order.

5. LABOR, TRAVEL, TOOLS, ODC'S

- (a) Exhibit B includes a list of labor categories and their associated fully loaded direct labor cost per hour. See Paragraph 17, Task Assignment and Control, for additional information. These labor categories and rates will be used by the Government to establish estimated cost and fixed fee for individual task assignments for the Task Order, including Options, if exercised (Reference H.4.1.3 of the contract). Travel expenses will be reimbursed in accordance with Federal Travel Regulations plus the actual indirect rates, not to exceed the ceiling indirect handling rates set forth in Schedule K of the contract.
- (b) TA's will be written as performance-based completion tasks, not level-of-effort (LOE) tasks. Therefore, the negotiated number of hours and skill mix will be used for estimating purposes for a particular TA and will lead to the estimated cost and fee for that TA. The Government will not specify hours in the TA document and is not purchasing a LOE on TA's.
- (c) Exhibit B also lists the burden rates to be applied to travel/training, tools, and ODC's in developing the estimated costs for individual TA's. Fee will not be increased for TA overruns.

6. ALLOCATION OF FIXED FEE UNDER TASK ASSIGNMENTS

The fixed fee negotiated at task order award will be considered reasonable and will also be the rate applied to all TA's, changes, or modification actions involving work not previously specified in the TA.

In no case shall fixed fee exceed the statutory limitations as set forth in the FAR.

7. FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (OCT 1992)

Notwithstanding clause E.3.1, Responsibility for the Inspection and Acceptance, of the contract, acceptance will take place at Langley Research Center, Hampton, VA, unless stated otherwise in task assignments.

8. PERIOD OF PERFORMANCE (LaRC 52.211-91) (AUG 1997)

The period of performance for Year 1 of this task order shall be from June 1, 2000 – May 31, 2001. The period of performance for the option years, if exercised by the Government, will be as follows:

- Option Year 2: June 1, 2001 – May 31, 2002
- Option Year 3: June 1, 2002 – May 31, 2003
- Option Year 4: June 1, 2003 – May 31, 2004
- Option Year 5: June 1, 2004 – May 31, 2005

9. PLACE OF DELIVERY (LaRC 52.211-92) (OCT 1992)

Delivery shall be f.o.b. destination NASA Langley Research Center, Hampton, VA 23681-2199 or as specified in task assignments.

10. PLACE(S) OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The place(s) of performance shall be the Contractor's facility, NASA Langley Research Center, Hampton, Virginia, and/or other sites as may be designated in the task assignments.

11. DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 1852.227-72) (JUL 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights – Retention by the Contractor (Short Form)", whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

<u>Title</u>	<u>Office Code</u>	<u>Address (including zip code)</u>
New Technology Representative	212	NASA, Langley Research Center Hampton, VA 23681-2199
Patent Representative	212	NASA, Langley Research Center Hampton, VA 23681-2199

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights – Retention by the Contractor (Short Form)"

clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

12. RESERVED

13. SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is identified below. Public vouchers for payment of costs shall include references to the numbers of this contract and the task order.

(b)(1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

NASA Langley Research Center
Attn: Financial Management Division, MS 175
Hampton, VA 23681-2199

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as directed by the Contracting Officer.

(c) If the Contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the Contractor shall prepare and submit vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to:

TBD

(2) Five copies of SF 1034, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addresses:

- (i) Copy 1 NASA Contracting Officer;
- (ii) Copy 2 Auditor;
- (iii) Copy 3 Contractor;
- (iv) Copy 4 Contract administration office; and
- (v) Copy 5 Project management office.

(3) The Contracting Officer may designate other recipients as required.

(d) Public vouchers of payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to:

Contracting Officer, Mail Stop 126
NASA Langley Research Center, Hampton, VA 23681-2199

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

14. LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NASA 18-52.245-77) (JUL 1997)

In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space, work area space, and utilities for 16 contractor personnel (14 at task order start plus 2 projected FTE's in Year 1) to support SOW areas 2(b), (c), and (f). Government telephones are available for official purposes only; pay telephones are available for contractor employees for unofficial calls.

(b) General- and special-purpose equipment, including office furniture.

(1) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(2) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

(3) Equipment to support the Data Visualization and Animation Laboratory (DVAL Lab), the Numerical Geometry Laboratory (GEOLAB), and the Geographical Information System (GIS) laboratories will be listed in the task assignments and the Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property.

(c) Safety and fire protection for Contractor personnel located on-site.

(d) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

(e) Cafeteria privileges for Contractor employees during normal operating hours.

(f) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

(g) The Government will provide and install the high speed data link interface equipment at both ends of the data circuit.

15. PROVIDING FACILITIES TO CONTRACTORS (LaRC 52.245-90) (AUG 1997)

(a) In accordance with FAR 45.302-1, it is policy of the Government that Contractors shall furnish all facilities required for performing Government contracts. "Facilities" include real property and plant equipment including personal property such as general purpose off-the-shelf equipment, machine tools, test equipment, furniture, vehicles, and Installation Accountable Property and Services as listed above in Paragraph 14. "Facilities" do not include material, special test equipment, special tooling or agency-peculiar property. Regarding the Millennium contract terminology, this policy also encompasses "Tools" as defined in H.4.2, unless otherwise specified in TA's.

(b) In keeping with the policy set forth in FAR 45.302-1, the Government will not provide NEW "facilities," except as provided for in TA's.

(c) However, if the Government provides EXISTING Government facilities in task assignments, when the existing facilities reach the end of their useful life during the contract period, or which are beyond economical repair, they shall be replaced by the Contractor, if the facilities are still needed for contract performance.

(d) Notwithstanding the "Allowable Cost and Payment" clause of this contract, cost of facilities are not an allowable cost except when charged to this contract in accordance with your approved accounting system.

16. ROLE OF NASA LANGLEY RESEARCH CENTER FOR GOVERNMENT/CONTRACTOR INTERFACE (LaRC 52.242-94) (AUG 1998)

The following describes the interface methods to be utilized by the Government in the assignment of work. Notwithstanding paragraph G.7 of the GSA contract, NASA Langley Research Center responsibilities will be as follows:

(a) The GSA Contracting Officer will issue, modify, and administer the basic task order awarded as a result of this TOR. The NASA Langley Contracting Officer will issue, modify, and administer Task Assignments (TA) under the basic Task Order. The NASA Contracting Officer will also issue incremental funding modifications against the Task Order. The Government reserves the right to require tracking and reporting of funding to the TA level.

(b) The Contracting Officer's Representative (COR) appointed under this task order will be a Langley Research Center employee.

(c) The NASA Langley Contracting Officer will also assign day-to-day Contract Administration functions, at the Task Assignment Level, to a NASA Langley Contract Specialist. The NASA Contract Specialist will provide any necessary contractual interpretation or guidance related to the TAs. Langley's management team will therefore consist of three persons: the Langley Research Center Contracting Officer, the Contract Specialist, and the COR.

(d) The Government will provide by written task assignments, applicable information such as: description of work; any specifications, drawings, etc.; a completion date; and any other instructions deemed appropriate. The Contractor shall furnish a control and reporting system capable of accurately obtaining actual hours and costs incurred on each task assignment.

(e) All modifications to the basic task order (except incremental funding) will be issued by GSA.

(f) Notwithstanding H.6.2, H.6.3, and H.6.4 of the GSA contract, Langley Research Center will coordinate meeting and travel schedules, coordinate correspondence, and will provide any necessary technical direction.

17. TASK ASSIGNMENT AND CONTROL

Task Assignments (TA) are the formal documents for directing work assignments to the Contractor under the CAPS Millennium Contract Task Order. The NASA Contracting Officer (CO) or the NASA CO's designated representative will issue the TA to the Contractor as the specific authorization or direction to perform work within the scope of the Statement of Work of the Task Order. TAs will include at a minimum the following:

- 1) The Task Order and TA number
- 2) The Date and Title of the TA
- 3) Description of the Work to be performed including deliverables and performance measurements
- 4) List of any items that will be provided to the Contractor by the Government
- 5) Any other information that may be needed for performance of the TA
- 6) Any security clearance required for the TA
- 7) Estimated Cost and Fee and any Fund Limitation
- 8) Period of Performance
- 9) The NASA Technical Monitor

The processes for software planning, development, acquisition, maintenance, and operations are based on the IEEE/IEA Standard 12207 – Standard for Information Technology – Software Life Cycle Processes and the IEEE/IEA Standard 1058 – Standard for Software Project Management Plans (SPMP). These two standards will apply to any TA that has requirements for development, maintenance, testing or operation of software. The procedure for initiating or modifying a work request (TA), monitoring an existing work request (TA), or termination of a work request (TA) is as follows:

a) The LaRC customer will contact the Task Order COR to discuss a possible TA for CAPS. It is often necessary for technical discussions to occur at this point between the customer, COR, and Contractor to fully understand the entire requirement and possible approaches. Once the determination has been made that the proposed requirements are within scope and the customer desires to proceed, the customer will document the requirements in a TA format that will address required elements of IEEE/IEA Standard 12207 for this project.

b) This initial TA, once submitted to the COR, will then be submitted to the Contractor to authorize the Contractor to develop a task plan (for certain tasks this will be an SPMP) and will establish a Not-To-Exceed (NTE) ceiling on the cost. The SPMP, if required, will be written in accordance with the IEEE/IEA Standard 12207. Once the Contractor receives the TA, there may be several meetings between the Contractor, customer, and COR to discuss technical details of the requirement. The Contractor shall prepare and submit to the COR, the SPMP or task plan. The task plan shall include the technical approach, list of deliverables, validation and verification procedures for the deliverables, schedule, and estimated cost and fee. The task plan should include the estimate of hours for each labor category and the estimate of other direct cost such as tools, travel, etc. This will be negotiated in final TA.

c) Once the SPMP or task plan is reviewed and approved by the Government, the initial TA will be modified to authorize the Contractor to perform the TA requirements.

18. KEY PERSONNEL

Pursuant to H.9.2 of the contract, the following individuals are designated as Key Personnel for this Task Order:

 Contract Manager

19. OPTIONS

The Contractor hereby grants to the Government options to extend the term of the task order for four additional periods of 12 months each. Such options are to be exercisable by issuance of a unilateral modification. Upon exercise of such option(s) by the Government, the following items will be increased by the amount specified below for each option period.

<u>Item</u>	<u>First Option Period</u>	<u>Second Option Period</u>	<u>Third Option Period</u>	<u>Fourth Option Period</u>
Period of Performance (Paragraph 7.)	12 months	12 months	12 months	12 months
Estimated Cost (Paragraph 2.)	\$ 5,434,760	\$ 6,256,843	\$ 6,425,250	\$ 6,623,483
Fixed Fee (Paragraph 2.)	\$ 270,006	\$ 310,812	\$ 319,168	\$ 329,013

20. CONTRACTOR EMPLOYEE'S SECURITY CLEARANCE (LaRC 52.204-90) (OCT 1996)

By virtue of their particular work assignment, certain Contractor employees, may be required to have a security clearance granted in accordance with the National Industry Security Program Operating Manual (NISPO) dated March 14, 1996. Clearances will be issued by the Department of Defense (DOD). Within 10 working days after an employee is identified by the Government and/or the Contractor as requiring a SECRET or higher clearance, the Contractor shall submit to the NASA Contracting Officer evidence of the submittal of a request for clearance to DOD for such employee. If the clearance for an employee has not been issued by DOD within 120 calendar days of the submittal of the request for clearance to DOD, the Contractor may be required to remove the employee from the contract.

21. SECURITY PROGRAM/FOREIGN NATIONAL EMPLOYEE INVESTIGATIVE REQUIREMENTS
(LaRC 52.204-91) (AUG 1997)

Prior to reporting to Langley Research Center (LaRC) to perform under this task order, each Foreign National shall have approval for access to LaRC facilities from the International Visits Coordinator, Office of the LaRC Chief of Security. A copy of the access authorization request shall be provided to the LaRC Chief of Security. Additionally, an investigation by the Government shall be completed on each Foreign National contractor prior to reporting to LaRC to perform under a contract or grant. A properly executed "Name Check Request" (NASA Form 531) and a completed "applicant" fingerprint card shall be submitted to the LaRC Security Office, Mail Stop 450, for each Foreign National contractor at least 75 days prior to the estimated entry on duty date. The NF 531 and fingerprint card may be obtained from the LaRC Security Office. If the access approval is obtained from NASA Headquarters prior to completion of the investigation, and the Contracting Officer requires a Foreign National to work on LaRC, an escort request may be considered by the LaRC Chief of Security.

22. UNESCORTED ACCESS BY CONTRACTOR EMPLOYEES

A satisfactorily completed background investigation is required for Contractor employees to have unescorted physical or electronic access to the facilities of Langley Research Center. As a minimum, all Contractor employees shall have a favorably adjudicated National Agency Check (NAC) for this access. The NAC is not required if the Contractor can certify that the employee has a Confidential or higher security clearance or a favorably adjudicated current investigation.

When it is necessary for an employee to perform work prior to the completion of the NAC, the employee shall be escorted at all times while on Langley Research Center by a U.S. citizen who has a NAC or higher level of investigation that is favorably adjudicated; or a Confidential or higher level security clearance; or as otherwise approved by the LaRC Security Officer.

If the work requires access to information Technology (IT) resources attached to the LaRC internal network, the Center IT Security Manager (CITSM) may grant a waiver, pending the favorable adjudication of the NAC, for up to 90 days for access to Center IT resources for U.S. citizens and Resident Aliens. No foreign national personnel shall be given access to Center IT resources attached to the LaRC internal network without both a favorably adjudicated NAC or higher level of clearance and the written permission of the CITSM after a satisfactory information protection plan (IPP) has been submitted to and approved by the CITSM.

23. SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES

a. The Contractor shall comply with the security requirements outlined in the latest version of the NASA Policy Directive (NPD) 2810, "Security of Information Technology" and NASA Procedures and Guidelines (NPG) 2810, "Security of Information Technology". These policies apply to all IT systems and networks under NASA's purview operated by or on behalf of the Federal Government, regardless of location.

b. The Contractor will ensure compliance by its employees with current Federal directives and guidelines that deal with IT Security including, but not limited to OMB Circular A-130, Appendix III, Presidential Decision Directive 63, and the Computer Security Act of 1987.

(1) All Federally owned information is considered sensitive to some degree and must be appropriately protected by the Contractor as specified in applicable IT Security Plans. Types of sensitive information that shall be found on NASA systems that the Contractor will have access to include, but are not limited to: Privacy Act information; resources protected by International Traffic in Arms Regulation (ITAR); national security information.

(2) The Contractor shall ensure that all systems connected to a NASA network or operated by the Contractor for NASA conform with NASA and Center security policies and procedures.

c. In addition to complying with any functional and technical security requirements set forth in the contract and Task Order, the Contractor shall initiate personnel screening checks for each contractor employee requiring

unescorted or unsupervised physical or electronic access to restricted or limited areas, or privileged access to NASA systems, programs, and data.

(1) The Contractor shall ensure that all such employees have at least a National Agency Check investigation. The Contractor shall submit a personnel security questionnaire (NASA Form 531, Name Check Request, for National Agency Check (NAC) investigation and Standard Form 85P, Questionnaire for Public Trust Positions, (for specified sensitive positions) and a Fingerprint Card (FD-258 with NASA overprint in Origin Block) to the Center Chief of Security for each Contractor employee who requires screening. The required forms may be obtained from Center Chief of Security.

i. When employee access is necessary prior to the completion of a NAC, the contractor employee will be granted interim access based on presumption of a satisfactorily completed NAC. In the event that the NAC is not satisfactory, access will be immediately withdrawn. Note: Background screening may not be required for employees with recent or current Federal Government investigations.

ii. The Contractor shall have an employee checkout process that ensures (1) the return of badges, keys, electronic access devices and NASA equipment; (2) notification to NASA within three working days for normal terminations and by the close of business for terminations for cause to disable any user accounts or network accesses that may have been granted to the employee. The Contractor shall ensure that the terminated employee has no continuing access to systems under the operation of the Contractor for NASA. Any access must be disabled the day the employee separates from the contractor.

(2) Granting a non-permanent resident alien (foreign national) access to NASA IT resources requires special authorization. The Contractor shall obtain authorization from the Center Chief of Security prior to the hiring of a non-permanent resident alien or granting access to NASA IT systems and networks.

d. The Contractor shall ensure that its employees with access to NASA information resources receive annual IT security awareness and training in NASA IT Security policies, procedures, computer ethics, and best practices.

(1) The Contractor shall employ an effective method for communicating to all its employees and assessing that they understand any ITS policies and guidance provided by the Center Information Technology Security Manager (CITSM) and/or Center CIO (CCIO) as part of the new employee briefing process. Further the Contractor shall ensure that all employees certify that they have read and understand any new ITS policy and guidance provided by the CITSM and CCIO over the duration of the contract.

(2) The Contractor shall ensure that its employees performing duties as system and network administrators in addition to performing routine maintenance possess specific IT security skills. These skills include: Utilizing software security tools, analyzing logging and audit data, responding and reporting to computer or network incidents, preserving electronic evidence, and recovering to a safe state of operation. Contractors are responsible for providing training to employees to whom they plan to assign system administrator roles. That training must provide the employees with a full level of proficiency to meet all NASA system administrator's functional requirements. The contractor must also have methods or processes to document that employees have mastered the training material or have the required knowledge and skills. This applies to all system administrator requirements that exist today or that may be included in the future.

e. The Contractor shall promptly report to the Center IT Security Manager any suspected computer or network security incidents occurring on any system operated by the Contractor for NASA or connected to a NASA network. If it is validated that there is an incident, the Contractor shall provide assistance and access to the affected system(s) and system records to NASA and any NASA designated third party so that a detailed investigation can be conducted.

f. The Contractor shall develop procedures and implementation plans that ensure that IT resources leaving control of an assigned user (such as being reassigned, repaired, replaced, excessed) has all NASA data and sensitive application software removed by a NASA- approved technique. NASA-owned applications acquired via a "site

license" or "server license" shall be removed prior to the resources leaving NASA's use. Damaged IT storage media for which data recovery is not possible will be degaussed or destroyed.

g. The Contractor shall afford NASA access to the Contractor's and subcontractor's facilities, installations, technical capabilities, operations, documentation, records, databases and personnel to the extent required to carry out a program of IT inspection and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data.

h. The Contractor shall document all vulnerability testing and risk assessments conducted as a required task in accordance with NPG 2810 and any current IT security requirements.

(1) The results of these tests shall be provided to the Center IT Security Manager. Any contractor system(s) connected to a NASA network or operated by the contractor for NASA may be subject to vulnerability assessment or penetration testing as part of the Center's IT security compliance assessment and the Contractor may be required to assist in the completion of these activities.

(2) A decision to accept any residual risk will be the responsibility of NASA. The Contractor shall notify the NASA system owner and the NASA data owner within 5 working days if new or unanticipated threats or hazards are discovered by the Contractor, made known to the Contractor, or if existing safeguards fail to function effectively. The Contractor shall make appropriate risk reduction recommendations to the NASA system owner and/or the NASA data owner and document the risk or modifications in the IT Security Plan.

i. The Contractor is required to develop a procedure to accomplish the recording and tracking of IT System Security Plans, IT system penetration and vulnerability tests for all NASA systems under its control or for systems outsourced to them to be managed on behalf of NASA. The Contractor must report the results of these actions directly to the Center IT Security Manager.

j. Within 30 days of task order award, the contractor will submit (for NASA approval) a post-award security implementation plan outlining how the contractor intends to meet the requirements of NPG 2810. The plan will subsequently be incorporated into the contract as a compliance document after Government approval. The plan shall demonstrate thorough understanding of NPG 2810 and shall include, as a minimum, the security measures and program safeguards to ensure that IT resources acquired and used by contractor and sub-contractor personnel:

(1) Are protected from unauthorized access, alteration, disclosure, or misuse of information processed, stored, or transmitted

(2) Can maintain the continuity of automated information support for NASA missions, programs, and functions

(3) Incorporate management, general, and application controls sufficient to provide cost-effective assurance of the systems' integrity and accuracy

(4) Have appropriate technical, personnel, administrative, environmental, and access safeguards.

(5) Document and follow a virus protection program for all IT resources under its control.

k. The Contractor shall incorporate this clause in all subcontracts where the requirements identified in this clause are applicable to the performance of the subcontract.

24. OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES
(LaRC 52.211-104) (MAY 1999)

(a). Observation of Regulations--In performance of that part of the contract work which may be performed at Langley Research Center or other Government installation, the Contractor shall require its employees to observe the rules and regulations as prescribed by the authorities at Langley Research Center or other installation

including all applicable Federal, NASA and Langley or other local installation safety, health, environmental and security regulations.

(b) Identification Badges--At all times while on LaRC property, the Contractor shall require its employees, subcontractors and agents to wear badges which will be issued by the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228). Badges shall be issued only between the hours of 6:30 a.m. and 3:30 p.m., Monday through Friday. Contractors will be held accountable for these badges and may be required to validate outstanding badges on an annual basis with the NASA LaRC Security Office. Immediately after employee termination or contract completion, badges shall be returned to the NASA Contract Badge and Pass Office.

25. QUALITY SYSTEM REQUIREMENTS (ISO 9001)

The Contractor's quality system shall be compliant with the requirements of ANSI/ISO/ASQC Q9001-1994, *Quality Systems Model for Quality Assurance in Production, Installation, and Servicing*. If the Contractor's quality system is not already compliant with the requirements of ANSI/ISO/ASQC Q9001-1994, the Contractor shall develop quality system procedures and associated documentation to become compliant within nine months after the contract effective date. The Contractor's quality system shall remain in compliance with ANSI/ISO/ASQC Q9001 -1994 during the term of the contract. The Government reserves the right to audit the Contractor's quality system at any time. The requirements of this clause do not flow down to subcontractors.

"Compliant" as used in this clause means that the contractor has defined, documented, and will continually implement during the term of the contract management-approved methods of operation that conform to the requirements given in the above-cited International Standard.

26. SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN -- TASK ORDER REPORTING

A. The Contractor's attention is directed to G.8 of the contract.

B. The approved Contractor Subcontracting Plan for this Task Order is attached hereto as Exhibit F and is hereby made a part of this task order.

27. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES BY REFERENCE and FULL TEXT:

A. The following FAR and NASA FAR Supplement clauses are applicable to this task order by reference:

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.227-14	Rights in Data General (Oct 1995) as modified by NASA FAR Supplement 1852.227-14. See H.3.5.

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
1852.204-75	Security Classification Requirements (SEP 1989)
1852.208-81	Restrictions on Printing and Duplicating (AUG 1993)
1852.215-84	Ombudsman (OCT 1996)
1852.216-75	Payment of Fixed Fee (DEC 1988)
1852.216-89	Assignment and Release Forms (JUL 1997)
1852.219-74	Use of Rural Area Small Businesses (SEP 1990)
1852.219-75	Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Reporting (JUL 1997)
1852.219-76	NASA 8 Percent Goal (JUL 1997)

1852.223-70	Safety and Health (MAR 1997)
1852.223-74	Drug and Alcohol-Free Workforce (MAR 1996)
1852.225-70	Export Licenses (FEB 2000)
1852.227-70	New Technology (NOV 1998)
1852.237-70	Emergency Evacuation Procedures (DEC 1988)
1852.242-71	Travel Outside of the United States (DEC 1988)
1852.242-72	Observance of Legal Holidays (AUG 1992)--Alternate II (SEP 1989)
1852.242-73	NASA Contractor Financial Management Reporting (JUL 1997)
1852.245-70	Contractor Requests for Government-Owned Equipment (JUL 1997)
1852.245-71	Installation-Accountable Government Property (JUN 1998)- Alternate I (MAR 1989)
1852.245-73	Financial Reporting of NASA Property in the Custody of Contractors (SEP 1996)
1852.245-76	List of Government-Furnished Property (Oct 1988) Insert: to be listed in Individual Task Assignment Orders

B. The following FAR and NASA FAR Supplement clauses are applicable to this task order and any task assignments issued under this task order:

52.232-20	Limitation of Cost (APR 1984)
52.232-22	Limitation of Funds (APR 1984)
52.252-2	Clauses Incorporated by Reference (FEB 1998)

CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

28. LIST OF EXHIBITS

Exhibit A, Statement of Work

Exhibit B, Labor Categories and Other Direct Costs (ODC) Rates

Exhibit C, Contract Documentation Requirements

Exhibit D, Contract Security Classification Specification DD Form 254

Exhibit E, Procedures for the Preparation and Approval of Contractor Reports for Langley Research Center, Form PROC. P72, June 1998

Exhibit F, Subcontracting Plan

EXHIBIT A – STATEMENT OF WORK

COMPUTATIONAL ANALYSIS AND PROGRAMMING SERVICES (CAPS)

A. BACKGROUND

The Systems Engineering Core (SEC) Competency at Langley Research Center (LaRC) is very broad in order to provide support for the wide range of research core competencies. It is a strategic combination of skills, technologies, and acquired knowledge that provide Langley with a competitive edge in performing its mission and programs.

Among its charters, the SEC provides engineering support for the development and application of unique software systems for data, control, and information technology applications to improve the productivity and quality of the products and services necessary to carry out the Center's aerospace research and support missions.

SEC leads the integration of central and distributed computing resources into a unified, cost-effective computing and communications environment. Creative solutions are implemented to manage, analyze, and present scientific, engineering, institutional, and programmatic information. Software engineering practices are promoted and applied in the development and maintenance of research, production, and flight software. A continuing challenge is to pioneer innovative solutions to meet advanced computing requirements. SEC leads the Center-wide coordination and oversight of all aspects of scientific and engineering information processing resources. In addition to providing support for the SEC there is support provided to all LaRC organizations for efforts that are within scope of this work requirement.

B. SCOPE

The Contractor shall, except as otherwise specified herein, furnish all personnel, facilities, equipment, materials, and transportation, necessary to perform tasks at the Langley Research Center (LaRC) to support basic and applied research areas such as aeronautics, earth science, space technology, structures, and materials. While the majority of work is directly in support of LaRC at the Center, other industry and government partners of LaRC are at time supported. This support may be provided at remote sites.

The Contractor shall provide a high-speed data link (minimum T-1 capability) to connect the Contractor's offsite facility to the Government's LaRCNET Local Area Network (LAN). This high-speed data line must be ethernet compatible.

Specific requirements for tasks within the work areas set forth below will be directed by the Government through issuance of task assignments (see Paragraph 16).

The work to be performed is in the scientific computing, information and data management, and software engineering areas. The Contractor shall provide direct computational analysis and programming support to specific research or flight projects and general-purpose computer applications support to LaRC.

C. WORK AREA REQUIREMENTS

1. Direct Support to Research and Flight Projects

The contractor shall provide direct computational analysis and programming services in support of aerospace research projects at LaRC. This activity includes the mathematical modeling of physical systems; development of real-time embedded systems; 3D graphical scene generation; the determination of computational techniques and algorithms for the solution of the resulting mathematical problems on appropriate computer systems; and the development or adaptation of computer codes to implement the solution process. It also includes the establishment of data management systems, graphical interfaces, and software for combining computer programs to provide for integrated analyses of multidisciplinary research projects. User-oriented documentation shall be provided for application software systems.

The contractor shall support the development of mission software for space and avionics flight projects such as the Aviation System Capacity Program, the Clouds and the Earth's Radiant Energy System (CERES) Project, and Aviation Safety Program. Embedded flight software systems shall be developed to provide real-time instrument control and data acquisition. Ground computer software systems shall be developed to support instrument development, test, calibration, commanding, and simulation. Software procedures shall be developed and implemented for the integration and test of a flight experiment with its spacecraft or airframe platform. On-site diagnostic support shall be provided for comprehensive performance tests that involve the operational behavior of the flight experiment and its attendant flight software and ground systems. The contractor shall provide project documentation for software systems developed as specified in the TAs. Programming languages required include, but are not limited, to FORTRAN, C, C++, Java, Javascript and Perl.

2. General Purpose Support

The Contractor shall provide general support in computer-related activities focused around the following capabilities of the SEC:

a. *High Performance Computing*

High performance computing support includes the effective and efficient use of networks of heterogeneous or homogeneous resources that may be comprised of supercomputers, highly parallel computers and workstation clusters. Requirements include but are not limited to:

- Facilitate the development, debugging, performance analysis, and optimization of user applications.
- Benchmark, test, and evaluate new architectures and software.
- Develop, and implement state-of-the-art numerical algorithms.

b. *Surface Modeling and Grid Generation*

Surface modeling and grid generation support includes the production of accurate surface definitions and numerical grids for Computational Fluid Dynamics (CFD), Computational Structural Mechanics (CSM), and other engineering analyses. This work is centered in the Geometry Laboratory (GEOLAB).

Requirements include but are not limited to:

- Create and modify numerical surface models to be compatible with software tools using multiblock structured or unstructured grid generation techniques using computer aided design software systems.
- Generate numerical grids compatible with analysis software and geometry.
- Analyze grid quality and validate surface modeling and grid generation integrity.
- Incorporate surface model measurements acquired using digital scanners into surface models.
- Develop software and user interfaces to integrate use of geometry tools.
- Provide consultation services in the areas of structured and unstructured grid generation and geometry modeling.

c. *Data Visualization*

Data visualization support involves the development and application of data analysis and visualization tools and techniques for a wide variety of disciplines including Computational Fluid Dynamics, Computational Structures, atmospheric modeling, remote sensing, and experimental fluid dynamics. This work is primarily in support of the Data Visualization and Analysis Laboratory (DVAL). Requirements include but are not limited to:

- Generate static and dynamic visualizations from experimental and computational data sets.
- Process and analyze large sequences of video images.
- Apply collaborative virtual environments technology to specific research problems.
- Develop custom software applications with sophisticated graphical user interfaces.
- Apply feature extraction techniques to complex, multivariate data sets.
- Consult on methods for the comparative visualization of simulated and observed results.

d. Data Management

Data management support includes information management applications, Database Management System (DBMS) support, data modeling, and program integration. Requirements include but are not limited to:

- Develop and maintain web-based information management systems for scientific and administrative data management including data model, graphical user interface, and database interface development.
- Evaluate, design, and/or implement information management technologies.
- Evaluate and apply database connectivity tools, database standards, and data format standards to data management applications.
- Provide administration of database management systems such as, but not limited to, Informix and Oracle and application server software.

e. Software Engineering

Software engineering support includes the definition, implementation, and continuous improvement of complete software development lifecycle processes and procedures for LaRC research programs. The primary focus of this area is to support LaRC organizations with implementing LaRC's Software Process Improvement Initiative, the software related Langley Management System – Center Procedures, and the key process areas of the Software Engineering Institute's Capability Maturity Model. Requirements in this area include, but are not limited to:

- Evaluate, implement, and aid others in the use of current and new software technologies, methods, processes, and procedures.
- Collect and analyze process, procedure, and product metrics to improve software reliability, productivity, quality, and system performance.
- Develop software requirements, design, code, and test products.
- Assist in the implementation and improvement of software related to Langley Management System-Center Procedures.
- Assist in the implementation of the Key Process Areas of the Software Engineering Institute's Capability Maturity Model.
- Assist LaRC Programs/Projects in managing the development of and production of glue-ware / middle-ware to implement their requirements.
- Assist LaRC Organizations/Programs/Projects in effectively implementing software reuse.
- Select and use Computer Aided Software Engineering (CASE) tools.

f. Geographic Information Systems (GIS)

Geographic Information Systems support includes the continuing development, application and operation of LaRC's GIS capabilities to allow for more effective use of infrastructure information. GIS provides LaRC with an intuitive decision making tool that integrates complex database queries with up-to-date graphical data and displays the relationships between them. In addition, GIS support includes complete networking support where needed for LaRC customers and partners. Requirements in this area includes, but is not limited to:

- Support for buildings spatial data

- Global Positioning System (GPS) support
- Support for Master Plan
- GIS product generation
- Software development and maintenance
- Network design, installation, and maintenance

g. World Wide Web(www) Support

WWW support is focused on application development activities at NASA Langley research center (LaRC). The term "www application" refers to software products that include a world wide web browser as their user interface. Typical www applications are comprised of static or dynamically generated code in hypertext markup language (html), often include executable components and sometimes include connectivity to databases. Requirements in this area include, but is not limited to:

- Definition and design
- Application development
- Code and data reuse repository development

h. Training

Training support includes the instruction of users and potential users of computers at LaRC in statement of work related areas such as database administration or grid generation. Requirements include but are not limited to:

- Develop training courses and associated documentation such as outlines, tutorial handouts, workbooks, viewgraphs, and video tape.
- Assist in preparation and updating of teaching materials and methods.
- Conduct and administer these courses, seminars, and demonstrations on a prescribed schedule.

D. GENERAL REQUIREMENTS

The Contractor shall comply with IEEE/EIA Standard 12207 – Standard for Information Technology - Software Life Cycle Processes and IEEE/EIA Standard 1058 - Standard for Software Project Management Plans when performing work to develop, maintain, operate or test software.

In the planning and execution of the work as specified in the TAs, the Contractor shall undertake any or all of the following functions:

1. Requirements Analysis and Planning

Analyze requirements to determine the feasibility of providing the desired software, target computer system, computer programs, results, documentation or other deliverables, and develop a Software Project Management Plan (SPMP) for accomplishing the work. The plan shall include the scope of the work; a technical discussion of the requirements and the proposed methods for satisfying them; designation of computer development and target systems; deliverable items; test plan; configuration management plan; risk analysis; and estimates of manpower and schedule. The plan shall be submitted to LaRC for approval prior to implementation.

2. Software Design and Development

Design, develop, and test software to meet specified technical and quality requirements.

3. Configuration Management

Develop Software Configuration Management Plans (SCMP) for software projects and perform configuration management and change control in accordance with the SCMP.

4. Risk Management

Develop and update Risk Management Plans for software projects and manage risks in accordance with the plan.

5. Software Modification, Maintenance, and Conversion

Modify, maintain and/or convert existing software in order to extend its function; improve its utility, accuracy, or reliability; decrease required resources; or make it compatible with upgraded operating systems or other computer systems. Maintain associated documentation.

6. Operations

Assemble and format input data and execute computer programs for system operations, testing, and obtaining research results.

7. Quality Assurance and Software Testing

Perform software quality assurance, prepare test plans, perform software acceptance testing, and document test results for third party software.

8. Documentation

Develop documentation such as SPMPs, SCMPs, user manuals, reference manuals, design documents, and test plans using either online or hard copy format.

9. Problem Analysis

Perform independent analysis of mathematical, logical, system approaches and perform comparison studies of competing techniques to solve problems.

10. Systems Administration

Provide systems administration services for PCs, workstations and distributed computer systems in support of work requirements as specified in the TAs.

11. Process Improvement

Collect and analyze process and product metrics. Identify, evaluate, and implement promising new technologies to improve productivity and quality.

**CSC/FEDERAL SECTOR
CIVIL GROUP**

NASA Langley's Computational Analysis & Programming Services (CAPS)
R320000378
1 June 2000 - 31 May 2001 (Base)
1 June 2001 - 31 May 2005 (Options 1-4)

EXHIBIT B - LABOR RATE CALCULATION

FULLY LOADED DIRECT LABOR COST PER HOUR YEAR 1

Labor Categories	Fully Loaded Direct Labor Cost per Hour
Contractor Site	
Master IT Analyst	
Sr. IT Analyst	
Journeyman IT Analyst	
Apprentice IT Analyst	
Jr. IT Analyst	
Entry Level IT Trainee	
Sr. Subject Matter Expert	
Subject Matter Expert	
Sr. Technician	
Journeyman Technician	
Technician	
Jr. Technician	
Procurement Mgmt Expert	
Project Control Officer	
Emerging Tech Expert	
Clerical	
Technical Writer	
Government Site	
Master IT Analyst	
Sr. IT Analyst	
Journeyman IT Analyst	
Apprentice IT Analyst	
Jr. IT Analyst	
Entry Level IT Trainee	
Sr. Subject Matter Expert	
Subject Matter Expert	
Sr. Technician	
Journeyman Technician	
Technician	
Jr. Technician	
Procurement Mgmt Expert	
Project Control Officer	
Emerging Tech Expert	
Clerical	
Technical Writer	

CSC/FEDERAL SECTOR
CIVIL GROUP

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EXHIBIT B - LABOR RATE CALCULATION

FULLY LOADED DIRECT LABOR COST PER HOUR YEARS 2-5

Labor Categories	Year 2	Year 3	Year 4	Year 5
Contractor Site				
Master IT Analyst				
Sr. IT Analyst				
Journeyman IT Analyst				
Apprentice IT Analyst				
Jr. IT Analyst				
Entry Level IT Trainee				
Sr. Subject Matter Expert				
Subject Matter Expert				
Sr. Technician				
Journeyman Technician				
Technician				
Jr. Technician				
Procurement Mgmt Expert				
Project Control Officer				
Emerging Tech Expert				
Clerical				
Technical Writer				
Government Site				
Master IT Analyst				
Sr. IT Analyst				
Journeyman IT Analyst				
Apprentice IT Analyst				
Jr. IT Analyst				
Entry Level IT Trainee				
Sr. Subject Matter Expert				
Subject Matter Expert				
Sr. Technician				
Journeyman Technician				
Technician				
Jr. Technician				
Procurement Mgmt Expert				
Project Control Officer				
Emerging Tech Expert				
Clerical				
Technical Writer				

**CSC/FEDERAL SECTOR
CIVIL GROUP**

NASA Langley's Computational Analysis & Programming Services (CAPS)

R320000378

1 June 2000 - 31 May 2001 (Base)

1 June 2001 - 31 May 2005 (Options 1-4)

Indirect Handling Rates

	Amount	Rate *	Total Cost
Year 1			
Travel / Training			
Tools / ODC's			
Subtotal			
Year 2			
Travel / Training			
Tools / ODC's			
Subtotal			
Year 3			
Travel / Training			
Tools / ODC's			
Subtotal			
Year 4			
Travel / Training			
Tools / ODC's			
Subtotal			
Year 5			
Travel / Training			
Tools / ODC's			
Subtotal			
TOTAL ODC COST			

* Note: Rate are exclusive of Fee

EXHIBIT C - CONTRACT DOCUMENTATION REQUIREMENTS

I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

A. Financial Management Reports--The Contractor shall comply with the clause of the TO entitled "NASA Contractor Financial Management Reporting" by monthly submission of NASA Form 533M. The form shall be prepared and submitted in accordance with the instructions set forth on the reverse side of the form and NASA Policy and Guidelines (NPG) 9501.2C, "NASA Contractor Financial Management Reporting," as further definitized below.

1. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported

2. Columns 8.a. and b. shall be completed using current estimates (forecasts) for the succeeding two months.

3. As a minimum, the following categories specified below shall be reported:

Direct Labor Hours
Direct Labor Dollars

Other Direct Costs:

Travel
Training
Tools
Subcontracts
Other ODC's

Total Other Direct Costs

Estimated Cost
Fixed Fee
Cost-Plus-Fixed Fee

4. Each 533M shall include a narrative explanation for variances exceeding 10 percent between planned hours and dollars and actual hours and dollars for each reporting category.

5. Full Cost Accounting Report--LaRC will be using a full cost accounting approach in all program areas throughout the Center. An essential element of this approach will be accurate reporting of contract costs (including actuals and forecast) for the Government fiscal year. Therefore, it is required that the contractor provide full cost information for each task assignment order.

B. Safety and Health Plan--Within 30 calendar days after the effective date of the contract, the Contractor shall submit a detailed safety and health plan showing how the Contractor intends to protect the life, health, and well being of NASA and Contractor employees as well as property and equipment. This plan, as approved by the Contracting Officer, should contain, as a minimum, the following:

1. Points of Contact and Responsibility--Organizational flow chart and description of responsibilities of each employee in your organization for safety.

2. Employee Safety Training, Certification and Programs--Detailed information on type of training required, parties responsible for certification, and outline of applicable regulations. Detail company programs which emphasize personal safety and motivate employees to be safety conscious.

3. LaRC Safety Policies/Procedures--Recognition of applicable LaRC safety policies and procedures such as LAPG 1710.10,

4. Accident Investigation and Reporting--Procedures for investigating and reporting accidents/incidents including immediate notification to the NASA LaRC Safety Manager of all injuries and damage to equipment or facilities.

5. Hazardous Operations--

- (a) Description of hazardous operations involved in contract performance.
- (b) Plans for apprising employees of all hazards to which they may be exposed.
- (c) Proper conditions and precautions for safe use and exposure to hazardous operations. Include recognition of LAPG 1710.12, Potentially Hazardous Materials.

6. People with Disabilities--In accordance with the Americans with Disabilities Act, the plans should specify that prior to assigning a person with disabilities to this contract, the Contractor shall contact the Disability Program Manager at (757) 864-7718. —

7. Other Safety Considerations--Any other safety considerations unique to your operation.

C. Quarterly Accident/Injury Report--The Contractor shall submit a Quarterly Accident/Injury Report within 10 operating days after the end of each' quarter.

D. Property in the Custody of Contractors (NASA FORM 1018)--The Contractor shall submit the NASA Form 1018 no later than October 31 of each year in accordance with the clause entitled "Financial Reporting of NASA Property in the Custody of Contractors."

E. Evidence of Insurance--The Contractor shall submit evidence of the insurance coverage, required by H-13 of the contract entitled "Required Insurance," (i.e., a Certificate of Insurance or other confirmation), to both the GSA and NASA Contracting Officers prior to performing under this task order. In the event the Government exercises its options to extend the term of the task order, the Contractor shall also present such evidence to the Contracting Officer prior to commencement of performance under the extension.

F. Monthly Technical Letter Progress Report--The Contractor shall submit monthly technical letter reports which shall include a report for each task assignment describing progress of the task to date, noting all technical areas in which effort is being directed and indicating the status of work within these areas. Tasks may be summarized in one letter report unless otherwise stipulated in individual task assignments. Reports shall be in narrative form, brief and informal in content. These reports shall include:

- 1. A narrative statement of work accomplished during the report period
- 2. A statement of current and potential problem areas and proposed corrective action
- 3. A discussion of work to be performed during the next report period
- 4. The direct labor-hours and total cost expended during the report period as well as the cumulative direct labor-hours and total cost expended to date for each task assignment and the projected direct labor-hours and total cost to be expended to completion of the task.

The monthly progress report shall be submitted within 10 days after the end of each calendar monthly report period. A monthly progress report shall not be required for the period in which the final report is due.

G. New Technology Report--The Contractor shall submit all disclosures of reportable items and subject inventions, interim reports, subcontract identification and other information as required by the clause at 1852.227-70. Further, upon completion of the work under the task order (or subcontract, if any) a final report shall be submitted.

H. Subcontracting Reports

The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, in accordance with the instructions on the reverse of the forms.

I. Federal Contractor Veterans Employment Report--In compliance with Clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era, the Contractor shall submit the Federal Contractor Veterans Employment Report (VETS-100) as required by this clause.

J. Documentation for Transferring Property to the Government--In accordance with the Installation-Accountable Government Property clause of this Task Order, accountability for that property which is acquired for the Government under this Task Order shall be passed to the Government using the following procedure:

The transfer of accountability shall be initiated by the Contractor submitting a Requisition and Invoice/Shipping Document, DD Form 1149, accompanied by a copy of the Contractor's applicable purchasing and receipt document for the property. The Contractor shall insert both the Contractor's Subcontract/ Purchase Order number and the Government Task Order/Contract number on the DD Form 1149 under the "Federal Stock Number, Description, and Coding of Material and/or Services" block. For purchases of supplies and materials, this document shall be submitted within 30 days after the end of each calendar-year quarter (that is, not later than January 30, April 30, July 30, and October 30). For equipment purchases, this document shall be submitted within five workdays after acceptance of each item of equipment by the Contractor. Receipt by the Contractor of a copy of the DD Form 1149 signed by the Government relieves the Contractor of accountability for the property specified on that form.

K. Security Implementation Plan—In accordance with Paragraph 23, Security Requirements for Unclassified Information Technology Resources, within 30 days of task order award, the Contractor shall submit for approval a Security Implementation plan.

Note: Paragraph L. ONLY applies to those offerors that are not ISO compliant at task order award:

L. Quality System Documents (ISO 9001)--The Contractor shall submit the following ISO-compliant documents in accordance with Paragraph 24 no later than nine months from the effective date of the task order:

Quality System Manual

Quality System Procedures - these procedures shall address: (1) contract and subcontract management, (2) customer requirement review and execution, (3) task management, including work order generation and processing, (4) document control, (5) handling of customer supplied product, (6) corrective and preventive action, (7) training of employees, and (8) design control for software development.

II. DOCUMENT DISTRIBUTION REQUIREMENTS

A. Unless otherwise specified elsewhere in this contract, reports and other documentation shall be submitted F.O.B. destination as specified below, addressed as follows:

National Aeronautics and Space Administration
Langley Research Center
Attn: Lisa M. Harvey, Mail Stop 126
Contract NAS1-00075
Hampton, VA 23681-2199

B. The following letter codes designate the recipients of reports and other documentation which are required to be delivered prepaid to Langley Research Center by the Contractor:

- A--LaRC Contracting Officer, Mail Stop 126
- B--LaRC Contracting Officer Representative, Mail Stop 125
- C--LaRC Alternate Contracting Officer Representative, Mail Stop 125
- D--New Technology Representative, Mail Stop 212
- E--Cost Accounting , Mail Stop 135
- F--Safety Manager, Mail Stop 429
- G--Industry Relations Office, Mail Stop 144
- H--Programs and Resources Division, Mail Stop 104
- I--Patent Counsel, Mail Stop 212
- J--Industrial Property Office , Mail Stop 377
- K--Small Business Specialist, Mail Stop 144
- L--Technical Monitor, Mail Stop as indicated in Task Assignment Order
- M--GSA Contracting Officer, Code 3TS

C. The following are the distribution requirements for reports and other documentation required with the numeral following the letter code specifying the number of copies to be provided:

<u>DOCUMENT</u>	<u>LETTER CODE AND DISTRIBUTION</u>
Financial Management Report (NASA Forms 533M) (Including Full Cost Accounting Report)	A-1, B-2, C-1, E-2, H-1, M-1
Safety and Health Plan	A-1, B-1, F-1
Monthly Technical Letter Progress Report	A-1, B-3, M-1
Quarterly Accident/Injury Report	A-1, B-1, F-1
New Technology Report	A-1, B-2, D-1
Patent Rights Report	A-1, B-2, D-1, I-1
Report of Government-Owned/Contractor Held Property (NASA Form 1018)	A-1, B-1, J-4
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1, K-1, M-1
Requisition and Invoice/Shipping Document (DD Form 1149)	J-1
Quality Documentation	A-2, B-1
Full Cost Accounting Report	A-1, B-2, C-1, L-1

D. When the Contract Administrator (A) is not designated above to receive a copy of a report or document, the Contractor shall furnish a copy of the report/document transmittal letter to the Contract Administrator. The Contractor shall also furnish a copy of the transmittal letter and a copy of each Financial Management Report to the delegated Administrative Contracting Officer of the cognizant DoD (or other agency) contract administrative services component.

**DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION
SPECIFICATION**

(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)

1. CLEARANCE AND SAFEGUARDING

A. Facility Clearance Required

SECRET

B. Level Of Safeguarding Required

NONE

2. THIS SPECIFICATION IS FOR: (X and complete as applicable)

A. PRIME CONTRACT NUMBER	
NAS1-00075	X
B. SUBCONTRACT NUMBER	
C. SOLICITATION OR OTHER NUMBER	Due Date (YYMMDD)

3. THIS SPECIFICATION IS: (X and complete as applicable)

A. ORIGINAL (Complete Date In All Cases)	Date (YYMMDD)
X	00/04/25
B. REVISED (Supersedes all previous specs)	Revision No. Date (YYMMDD)
C. FINAL (Complete Item 5 In All Cases)	Date (YYMMDD)

4. IS THIS A FOLLOW-ON CONTRACT?

 YES

 NO

NO. If Yes, complete the following: **NAS1-20431**

Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.

5. IS THIS A FINAL DD FORM 254?

 YES

 NO

NO. If Yes, complete the following:

In response to the contractor's request dated _____ retention of the classified material is authorized for the period _____

6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)

A. Name, Address, And Zip Code	B. Cage Code	C. Cognizant Security Office (Name, Address, And Zip Code)
COMPUTER SCIENCES CORPORTATION FEDERAL SECTOR-CIVIL GROUP 15245 SHADY GROVE RD ROCKVILLE, MD 20850	01UG8	DEFENSE SECURITY SERVICES 2850 EISENHOWER AVE ALEXANDRIA, VA 22331-12111

7. SUBCONTRACTOR

A. Name, Address, And Zip Code	B. Cage Code	C. Cognizant Security Office (Name, Address, And Zip Code)
N/A	N/A	N/A

8. ACTUAL PERFORMANCE

A. Location	B. Cage Code	C. Cognizant Security Office (Name, Address, And Zip Code)
N/A	N/A	N/A

9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

COMPUTATIONAL ANALYSIS AND PROGRAMMING SERVICES, AWARDED UTILIZING GSA MILLENNIA CONTRACT

10. CONTRACTOR WILL REQUIRE ACCESS TO:	YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	YES	NO
A. Communications Security (Comsec) Information			A. Have Access To Classified Information Only At Another Contractor's Facility Or A Government Activity	X	
B. Restricted Data		X	B. Receive Classified Documents Only		X
C. Critical Nuclear Weapon Design Information		X	C. Receive And Generate Classified Material		X
D. Formerly Restricted Data		X	D. Fabricate, Modify, Or Store Classified Hardware		X
E. Intelligence Information			E. Perform Services Only	X	
(1) Sensitive Compartmented Information (SCI)		X	F. Have Access To U.S. Classified Information Outside The U.S., Puerto Rico, U.S. Possessions And Trust Territories		X
(2) Non-SCI		X	G. Be Authorized To Use The Services Of Defense Technical Information Center (DTIC) Or Other Secondary Distribution Center		X
F. Special Access Information		X	H. Require A Comsec Account		X
G. Nato Information		X	I. Have Tempest Requirements		X
H. Foreign Government Information		X	J. Have Operations Security (OPEC) Requirements		X
I. Limited Dissemination Information		X	K. Be Authorized To Use The Defense Courier Service		X
J. For Official Use Only Information		X	L. Other (Specify)		
K. Other (Specify)					
N/A					

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release

Direct Through (Specify)

"NASA LANGLEY RESEARCH CENTER, M/S 126, HAMPTON, VA 23681-2199"
ATTN: Lisa Harvey "757-864-2444"

to the Office of Public Affairs, National Aeronautics and Space Administration, Washington, DC 20546, for review.

13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.)

MOST OF THE WORK ON THIS CONTRACT WILL BE PERFORMED AT GOVERNMENT FACILITIES WHERE CLASSIFICATION GUIDANCE WILL BE PROVIDED AS NECESSARY.

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.)

Yes No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.)

Yes No

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL Michael Rammel	b. TITLE Security Specialist	c. TELEPHONE (Include Area Code) 757-864-3419
---	--	---

d. ADDRESS (Include Zip Code)
**NASA LANGLEY RESEARCH CENTER
 M/S 450, ATTN: MICHAEL RAMMEL
 HAMPTON, VA 23681-2199**

e. SIGNATURE
 Original on file at LaRC

17. REQUIRED DISTRIBUTION

<input checked="" type="checkbox"/>	A. Contractor
<input type="checkbox"/>	B. Subcontractor
<input checked="" type="checkbox"/>	C. Cognizant Security Office For Prime And Subcontractor
<input type="checkbox"/>	D. U.S. Activity Responsible For Overseas Security Administration
<input checked="" type="checkbox"/>	E. Administrative Contracting Officer
<input type="checkbox"/>	F. Others As Necessary

ENCLOSURE E

PROCEDURES FOR THE PREPARATION AND APPROVAL OF CONTRACTOR REPORTS FOR LANGLEY RESEARCH CENTER

GUIDELINES: The following documents or subsequent editions in effect on date of contract shall serve as the basis for preparation of Contractor Reports:

NPG 2200.2A NASA Procedures and Guidelines (<http://www.sti.nasa.gov/neghome3.htm>) DoD 5220.22-M, National Industrial Security Program Operating Manual (NISPOM), January 1995

FORMAT AND ORGANIZATION: The format and organization of a Contractor Report should be consistent and follow the practices recommended in the NASA Procedures and Guidelines. For questions concerning format, contact Langley Research Information Management at (757) 864-2518. A Report Documentation Page (RDP) (Standard Form 298) shall be included as the last page in the report. The RDP is available electronically at (<http://www.sti.nasa.gov/neghome3.htm>). A sample of this form is attached.

TRADEMARKS: U.S. Government policy prohibits endorsing or criticizing commercial products in its publications. Use of trademarks is discouraged. If a trademark must be used, its owner must be credited and the trademark must be used as an adjective modifying the generic name.

REFERENCES: Material that is not obtainable or available must not be listed in the references. Documents of NASA contracts published as in-house documents must be referenced as NASA CR's, not as NASA Contract Numbers.

SECURITY: Security markings, when necessary, shall be consistent with DD Form 254, the directive issued by the Security Classification Officer, and shall conform to requirements established in the DoD NISPOM. For questions concerning security classification, contact LaRC Security Classification Officer at (757) 864-3420.

APPROVAL COPIES.

1. Upon completion of a report, the Contractor shall submit five (5) approval copies to the Contracting Officer's Technical Representative (COTR) for review and approval by NASA. These copies may be reproduced on both sides of sheet where feasible and assembled by an economical means by the Contractor. **Notify the Langley Contracting Officer when the approval copies are submitted.**
2. The Contractor will be notified of acceptance of the approval copy of the report by the COTR within thirty (30) days. Approval will be contingent upon changes required by NASA.

FINAL (REVISED) COPIES:

1. Upon receipt of acceptance from the Langley COTR, the Contractor shall prepare an original manuscript incorporating the changes required by NASA.
2. The Contractor shall submit the original manuscript and up to five (5) duplicate copies to the Langley COTR within thirty (30) days after receipt of acceptance. Electronic PostScript files for the cover and report (including figures and tables), and Report Documentation Page source file shall also be submitted to the Langley COTR, if available. **Notify the Langley Contracting Officer when the final revised report is submitted.**

Contact the Langley COTR for information on transmitting the electronic files by file transfer protocol (FTP). The electronic files may be saved on a 3.5-inch, high density, double-sided disk(s) and submitted with the final manuscript. The disk(s) and files should be labeled to properly identify the report.

ORIGINAL MANUSCRIPT: The original manuscript of a Contractor Report shall consist of a single-sided, unbound, laser printed copy of the text with all tables, figures, artwork, graphs, photos and captions included on the pages. Photographs shall be either scanned electronic images or unscreend glossy prints that have been cut and mounted on the pages. The manuscript shall be single spaced with consecutive page numbers on all pages, excluding the cover. The manuscript shall be printed on 8-1/2 by 11 paper with a maximum page image are of 7-1/8 by 9-3/16 inches

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE May 1991	3. REPORT TYPE AND DATES COVERED Contractor Report		
4. TITLE AND SUBTITLE Science Needs for Real-Time Adaptable Data Products From the Earth Observing System		5. FUNDING NUMBERS CC NAS1-18676 TA 6		
6. AUTHOR(S) Paul D. Try, Paul F. Twitchell and Christopher R. Redder				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Science and Technology Corporation 101 Research Drive Hampton, VA 23666-1340		8. PERFORMING ORGANIZATION REPORT NUMBER STC-42518		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-2199		10. SPONSORING/MONITORING AGENCY REPORT NUMBER NASA/CR		
11. SUPPLEMENTARY NOTES Langley Technical Monitor: David E. Bowker Final Report				
12a. DISTRIBUTION/AVAILABILITY STATEMENT (If contract specifies restricted distribution, state restriction instead of Unclassified-Unlimited.) Unclassified-Unlimited (If contract specifies restricted dist., state restriction instead of Unc.-Unl.) Subject Category 00 (See http://larcpubs.larc.nasa.gov/newhtml/subject.html) Distribution: Standard or Nonstandard (Tech. Monitor determines dist.) Avai			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Advancing the understanding of the Earth system requires improved knowledge of the time-variant governing processes, and the knowledge of these processes often comes only from real-time observations of the changing variables as seen from space. The unpredictability of what is to be measured and at what rate requires flexibility in the observational capability. The Earth Observing System (EOS) will be a major source of observational data during the next 10- to 25-year timeframe. Consequently, to ensure the needed advances in the understanding of the Earth system, real-time onboard processing is concluded to be a critical need for EOS. <i>(Provide an unclassified abstract not to exceed 200 words)</i>				
14. SUBJECT TERMS Real-time data needs; Onboard data processing; Real-time Processing EOS; EOS communication needs.			15. NUMBER OF PAGES 76	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT	

INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling each block of the form follow. It is important to *stay within the lines to meet optical scanning requirements*.

Block 1. Agency Use Only (*Leave blank*).

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g., 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g., 10 Jul 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract PR - Project
G - Grant TA - Task
PE - Program WU - Work Unit
 Element Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (*If known*)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with . . . ; Trans. of . . . ; To be published in When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g., NOFORN, REL, ITAR).

DOD	-	See DoDD 5230, "Distribution Statements on Technical Documents"
DOE-		See authorities.
NASA	-	See Handbook NHB 2200.2.
NTIS	-	Leave blank.

Block 12b. Distribution Code.

DOD	-	Leave blank.
DOE-		Enter DOE distribution categories From the Standard Distribution for Unclassified Scientific and Technical Reports.
NASA	-	Leave blank.
NTIS	-	Leave blank.

Block 13. Abstract. Include a brief (*Maximum 200 words*) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (*NTIS only*).

Blocks 17. - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

Page 30 is "RESERVED"

EXHIBIT F -- SUBCONTRACTING PLAN

Attached as follows

4. **EQUITABLE OPPORTUNITY**

In accordance with FAR 19.704(a)(3) and to ensure that SB/SDB/WOSB/HUBZ concerns have an equitable opportunity to compete for subcontracts, the following activities will be conducted:

A. Outreach efforts to obtain sources

- Contacting minority and small business trade associations
- Contacting business development organizations
- Requesting sources from the Small Business Administration's Internet based Procurement database (PRO-net)
- Attending SB/SDB/WOSB/HUBZ procurement conferences and trade fairs.

B. Internal efforts to guide and encourage purchasing personnel

- Presenting workshops, seminars, and training programs
- Establishing, maintaining, and using SB/SDB/WOSB/HUBZ source lists, guides and other data for soliciting subcontracts
- Monitoring activities to evaluate compliance with the subcontracting plan

C. Additional efforts

- Establishing and maintaining a Small Business Program Advisory Council
- Supporting community organizations that work to increase opportunities for small, minority and women-owned businesses
- Advising SB/WOSB/SDB/HUBZ about how to conduct business with CSC and refer them to appropriate staff
- Providing CSC and community resource information to SB/SDB/WOSB/HUBZ concerns
- Developing formal and informal mentoring relationships with SB/SDB/WOSB/HUBZ concerns

5. **CLAUSE INCLUSION AND FLOW DOWN**

Ensure that all procurements that offer further subcontracting opportunities include FAR Clause 52.219-8 whenever awarded under a U.S. Government prime contract or subcontract containing FAR Clause 52.219-9.

Ensure that all procurements awarded to other than small businesses include the following clause whenever awarded under a U.S. Government prime contract or subcontract containing FAR Clause 52.219-9:

“As prescribed in FAR Subpart 19.301(d), the Federal U.S. Government may impose a penalty against any firm misrepresenting their business size as a SB/SDB/WOSB/HUBZ status for the purpose of obtaining a procurement that is to be included as part or all of a goal contained in a CSC subcontracting plan.”

CSC will ensure that prior to the award of any procurement in excess of \$500,000 (\$1 million for construction) awarded to other than a small business under a U.S. Government prime contract or subcontract containing FAR Clause 52.219-9, the seller adopts and submits a subcontracting plan to the B/SCA similar to the plan agreed to by CSC and agrees to submit Standard Forms (SF) 294 and 295.

6. REPORTING AND COOPERATION

CSC will (1) cooperate in any studies or surveys as may be required, (2) submit periodic reports that show compliance with the subcontracting plan; (3) submit SF 294, "Subcontracting Reports for Individual Contracts," and SF 295, "Summary Subcontract Report," in accordance with the instructions on the forms; and (4) ensure that subcontractors agree to submit SF 294 and SF 295.

7. RECORDKEEPING

CSC will maintain records to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan. These records will include, but not be limited to, the following:

- A. SB/SDB/WOSB/HUBZ concern source lists, guides, and other data identifying such vendors.
- B. Organizations contacted for SB/SDB/WOSB/HUBZ sources.
- C. On a contract-by-contract basis, records on all subcontract solicitations over \$100,000 which indicate for each solicitation (1) whether small business concerns were solicited, and if not, why not; (2) whether small disadvantaged business concerns were solicited, and if not, why not; (3) whether women-owned small business concerns were solicited, and if not, why not; (4) whether HUBZone small business concerns were solicited, and if not, why not; and (5) if applicable, the reasons for the failure of small business concerns to receive the subcontract award.
- D. Records to support other outreach efforts, e.g., contacts with minority and small business trade associations, attendance at SB/SDB/WOSB/HUBZ procurement conferences and trade fairs.
- E. Records to support internal activities to (1) guide and encourage purchasing personnel, e.g., workshops, seminars, training programs, incentive awards; and (2) monitor activities to evaluate compliance.
- F. On a contract-by-contract basis, records to support subcontract award data including the name, address, and business size of each subcontractor.

8. TIMELY PAYMENTS TO SUBCONTRACTORS

CSC has established procedures to ensure the timely payment of amounts due pursuant to the terms of the subcontracts with SB/SDB/WOSB/HUBZ small business concerns.

9. DESCRIPTION OF GOOD FAITH EFFORT

CSC intends to use all reasonable and good faith efforts (as described in this Plan) to award the stated percentages of the final actual subcontract base amount with SB/SDB/WOSB/HUBZ firms. The following steps shall be taken.

- A. Issue and promulgate company-wide policy statements in support of the SB/SDB/WOSB/HUBZ effort, develop written procedures and work instructions, and assign specific responsibilities regarding requirements of the applicable Public Law.
- B. Review specific procurement actions for possible acquisition from eligible SB/SDB/WOSB/HUBZ firms.
- C. Demonstrate continuing management interest and involvement in support of this effort through such actions as regular reviews of progress and establishment of overall corporate and divisional goals and objectives.
- D. Train and motivate CSC personnel regarding the need for the support of SB/SDB/WOSB/HUBZ firms.
- E. Assist SB/SDB/WOSB/HUBZ concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns to enable these firms to fairly compete.
- F. Counsel and discuss subcontracting opportunities with representatives of SB/SDB/WOSB/HUBZ.
- G. Execute Service Agreements, Teaming Agreements, and Basic Ordering Agreements with qualified SB/SDB/WOSB/HUBZ firms, as required, in an attempt to assure availability and usage of SB/SDB/WOSB/HUBZ subcontractor personnel to support CSC's work efforts when required.
- H. Make available specifications, drawings, and other relevant data so that qualified, known SB/SDB/WOSB/HUBZ firms have an equal opportunity in preparing bids.
- I. Establish and maintain a categorized list of potential subcontractors with separate identification of SB/SDB/WOSB/HUBZ concerns.